#### **ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18

Stylesheet Version v18.0

Title of Invention

DIRECTIONAL ELECTROMAGNETIC WAVE RESISTIVITY APPARATUS AND METHOD

**Application Number:** 

10/709212

Confirmation Number:

First Named Applicant:

QIMING LI

Attorney Docket Number:

20.2886

Art Unit:

2362

Examiner:

Whittington

Search string:

( 6163155 or 5115198 or 4319191 or 5508616 or 5757191 or 5781436 or 6044325 or 6147496 or 6181138 or 6476609 or 5517464 or 5235285 or 6351127 or 6297639 or 6380744 or 6541979 or 6556015 or 6573222 or 6566881 or 6557794 or 6304086 or 6624634 or 6584408 or 6667620 or 6594584 or 6630830 or 20030184302 or 20040046560 or 20040046561 or 20030085707 or 20020057210 or 20030184304

or 20030184488 or 20030200029 or 20020079899 or 20030229450 ).pn

#### **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

1	6163155	0000 10 10				
	1 0100100	2000-12-19	BITTAR -			
2	5115198	1992-05-19	GIANZERO ET AL.			
3	4319191	1982-03-09	MEADOR ET AL.			
4	5508616	1996-04-16	SATO ET AL.	~		
5	5757191	1998-05-26	GIANZERO			
6	5781436	1998-07-14	FORGANG ET AL.			
7	6044325	2000-03-28	CHAVRAVARTHY ET AL.			
8	6147496	2000-11-14	STRACK ET AL.			
9	6181138	2001-01-30	HAGIWARA ET AL.			
10	6476609	2002-11-05	BITTAR			
11	5517464	1996-05-14	LERNER ET AL.			
12	5235285	1993-08-10	CLARK ET AL.			
13	6351127	2002-02-26	ROSTHAL ET AL.			
14,	6297639	2001-10-02	CLARK ET AL.			
	3 4 5 6 7 8 9 10 11 12 13	3 4319191 4 5508616 5 5757191 6 5781436 7 6044325 8 6147496 9 6181138 10 6476609 11 5517464 12 5235285 13 6351127	3       4319191       1982-03-09         4       5508616       1996-04-16         5       5757191       1998-05-26         6       5781436       1998-07-14         7       6044325       2000-03-28         8       6147496       2000-11-14         9       6181138       2001-01-30         10       6476609       2002-11-05         11       5517464       1996-05-14         12       5235285       1993-08-10         13       6351127       2002-02-26         14       6297639       2001-10-02	AL.  3 4319191 1982-03-09 MEADOR ET AL.  4 5508616 1996-04-16 SATO ET AL.  5 5757191 1998-05-26 GIANZERO  6 5781436 1998-07-14 FORGANG ET AL.  7 6044325 2000-03-28 CHAVRAVARTHY ET AL.  8 6147496 2000-11-14 STRACK ET AL.  9 6181138 2001-01-30 HAGIWARA ET AL.  10 6476609 2002-11-05 BITTAR  11 5517464 1996-05-14 LERNER ET AL.  12 5235285 1993-08-10 CLARK ET AL.  13 6351127 2002-02-26 ROSTHAL ET AL.	AL.  3 4319191 1982-03-09 MEADOR ET AL.  4 5508616 1996-04-16 SATO ET AL.  5 5757191 1998-05-26 GIANZERO  6 5781436 1998-07-14 FORGANG ET AL.  7 6044325 2000-03-28 CHAVRAVARTHY ET AL.  8 6147496 2000-11-14 STRACK ET AL.  9 6181138 2001-01-30 HAGIWARA ET AL.  10 6476609 2002-11-05 BITTAR  11 5517464 1996-05-14 LERNER ET AL.  12 5235285 1993-08-10 CLARK ET AL.  13 6351127 2002-02-26 ROSTHAL ET AL.  14 6297639 2001-10-02 CLARK ET AL.	AL.  3 4319191 1982-03-09 MEADOR ET AL.  4 5508616 1996-04-16 SATO ET AL.  5 5757191 1998-05-26 GIANZERO  6 5781436 1998-07-14 FORGANG ET AL.  7 6044325 2000-03-28 CHAVRAVARTHY ET AL.  8 6147496 2000-11-14 STRACK ET AL.  9 6181138 2001-01-30 HAGIWARA ET AL.  10 6476609 2002-11-05 BITTAR  11 5517464 1996-05-14 LERNER ET AL.  12 5235285 1993-08-10 CLARK ET AL.  13 6351127 2002-02-26 ROSTHAL ET AL.  14 6297639 2001-10-02 CLARK ET AL.

15 6380744 2002-04-30 CLARK ET AL.  16 6541979 2003-04-01 OMERAGIC  17 6556015 2003-04-29 OMERAGIC ET AL.  18 6573222 2003-06-03 NAIR ET AL.  19 6566881 2003-05-20 OMERAGIC ET AL.  20 6557794 2003-05-06 ROSTHAL ET AL.  21 6304086 2001-10-16 MINERBO ET AL.  22 6624634 2003-09-23 ROSTHAL ET AL.  23 6584408 2003-06-24 OMERAGIC  24 6667620 2003-12-23 HOMAN ET AL.							
17 6556015 2003-04-29 OMERAGIC ET AL.  18 6573222 2003-06-03 NAIR ET AL.  19 6566881 2003-05-20 OMERAGIC ET AL.  20 6557794 2003-05-06 ROSTHAL ET AL.  21 6304086 2001-10-16 MINERBO ET AL.  22 6624634 2003-09-23 ROSTHAL ET AL.  23 6584408 2003-06-24 OMERAGIC	200	80744	6380	5	15	W	12
AL.  18 6573222 2003-06-03 NAIR ET AL.  19 6566881 2003-05-20 OMERAGIC ET AL.  20 6557794 2003-05-06 ROSTHAL ET AL.  21 6304086 2001-10-16 MINERBO ET AL.  22 6624634 2003-09-23 ROSTHAL ET AL.  23 6584408 2003-06-24 OMERAGIC	200	41979	6541	6	16	$\cdot$	
18       6573222       2003-06-03       NAIR ET AL.         19       6566881       2003-05-20       OMERAGIC ET AL.         20       6557794       2003-05-06       ROSTHAL ET AL.         21       6304086       2001-10-16       MINERBO ET AL.         22       6624634       2003-09-23       ROSTHAL ET AL.         23       6584408       2003-06-24       OMERAGIC	200	56015	6556	7	17	$\prod$	
19 6566881 2003-05-20 OMERAGIC ET AL.  20 6557794 2003-05-06 ROSTHAL ET AL.  21 6304086 2001-10-16 MINERBO ET AL.  22 6624634 2003-09-23 ROSTHAL ET AL.  23 6584408 2003-06-24 OMERAGIC		l				П	
AL.  20 6557794 2003-05-06 ROSTHAL ET AL.  21 6304086 2001-10-16 MINERBO ET AL.  22 6624634 2003-09-23 ROSTHAL ET AL.  23 6584408 2003-06-24 OMERAGIC	200	73222	6573	8	18	П	
20 6557794 2003-05-06 ROSTHAL ET AL.  21 6304086 2001-10-16 MINERBO ET AL.  22 6624634 2003-09-23 ROSTHAL ET AL.  23 6584408 2003-06-24 OMERAGIC	200	66881	6566	9	19		
AL.  21 6304086 2001-10-16 MINERBO ET AL.  22 6624634 2003-09-23 ROSTHAL ET AL.  23 6584408 2003-06-24 OMERAGIC							-1/
21 6304086 2001-10-16 MINERBO ET AL.  22 6624634 2003-09-23 ROSTHAL ET AL.  23 6584408 2003-06-24 OMERAGIC	200	57794	6557	0	20		П
22 6624634 2003-09-23 ROSTHAL ET AL. 23 6584408 2003-06-24 OMERAGIC			1				
22 6624634 2003-09-23 ROSTHAL ET AL. 23 6584408 2003-06-24 OMERAGIC	200	04086	6304	1	21		
AL. 23 6584408 2003-06-24 OMERAGIC							Ш
23 6584408 2003-06-24 OMERAGIC	200	24634	6624	2	22		П
							Ш
24   6667620   2003-12-23   HOMAN ET AL.   ———————————————————————————————————	200	84408	6584	3	23		
	200	67620	6667	4	24		П
25 6594584 2003-07-15 OMERAGIC ET	200	94584	6594	5	25		
AL.							
26 6630830 2003-10-07 OMERAGIC ET	200	30830	6630	6	26		
P   AL.							7

# **US Published Applications**

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Y P		Class	Subclass
安	1	20030184302	2003-10-02	OMERAGIC ET	~		
KAV	1			AL.			
ſ	2	20040046560	2004-03-11	ISTKOVICH ET	_		
				AL.			
	3	20040046561	2004-03-11	ISTKOVICH ET			
				AL.			,
	4	20030085707	2003-05-08	MINERBO ET			
				AL.			
	5	20020057210	2002-05-16	FREY ET AL.			
$\prod$	6	20030184304	2003-10-02	HOMAN ET AL.			-
П	7	20030184488	2003-10-02	SMITH ET AL.			
	8	20030200029	2003-10-23	OMERAGIC ET			
				AL.			
$\Box$	9	20020079899	2002-06-27	FREY ET AL.			
P	10	20030229450	2003-12-11	STRICKLAND			

# Signature

Examiner Name Date	
Bux11 3/30/66	

FORM PTO	LIST O	Modified) F INFORMATION PROVIDED BY APPLICANT ral sheets if necessar	ATTY. DOCKET NO. SERIAL 20.2886 10/709,212 APPLICANT: Li et al.			
PADOMER OF ST				FILING DATE: 04/21/04	2862	
REFERENCE Examiner	DESIGNAT	ION US PATENT DOCUM	ients	1		
Initial	AA	Document No.	Date	Pa	tentee	
	XU					
	AB					
	AC				ç	
	AD				······································	
	AE					
	AF ,					
	AG				······································	
	AH					
	AI					
~~~~~		T DOCUMENTS				
- TORL	ada FALL	Document No.	Date	Gamahan	Translation Yes No	
	AL	Document No.	Dace	Country	Yes No	
	AM					
	AN					
	AO					
OTHER INFO ETC.)	RMATION )	PROVIDED (AUTHOR, TITLE				
SW	AR	I.R.Tribe et al., NP Systems and LWD Measu Conference and Exhibi 2001	recise well rements,'' tion, New O	Placement using Ro SPE 71396, SPE Annua Orleans, LA, Sept. 3	tary Steerable al Technical 0, 2001 - October 3	
	AS					
	AT					
	1					
EXAMINER	5 4	1 /		DATE CONSIDERED	131106	

EXAMINER: Initial in relatence considered, whether or not citation is in conformance with MPEP 609, Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

1. The attached cited information should not be construed as an admission that any of the above items are prior art to the subject invention.

### **ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18

Stylesheet Version v18.0

Title of Invention

DIRECTIONAL ELECTROMAGNETIC WAVE RESISTIVITY APPARATUS AND METHOD

Application Number:

10/709212

Confirmation Number:

3211

First Named Applicant:

QIMING LI

Attorney Docket Number:

20.2886

Art Unit:

Examiner:

Search string:

(20040124841 or 20040108853).pn

<u>Certification</u>: This Information Disclosure Statement was submitted under the following conditions, which satisfies the requirement under 37 CFR 1.97(e). The filer certified:

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement.

# **US Published Applications**

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
LAW	1	20040124841	2004-07-01	OMERAGIC			
ite	2	20040108853	2004-06-10	ROSTHAL			

# Signature

/	
/ Examiner Name	Date
Knith	3/30/06

		OIPE	Page 1 of 1		
ofte maor	LIST OF	INFORMATION PROVIDED BY APPLICANT PADEMANATION BY APPLICANT PADEMANATION THE COMMENT THE C	v)	ATTY. DOCKET NO. 20.2886	SERIAL NO. 10/709,212
	,,,,,		• '	APPLICANT: L1 et a	1.
				FILING DATE: 04/21/04	GROUP
REFERENCE Examiner	DESIGNAT	ION U.S. PATENT DOCU	MENTS	Ψ	<u> </u>
Initial		Document No.	Date		centee
LAW	AA	5406206	04/11/95	Safinya et al.	
Low	AB	4766384	08/23/88	Kleinberg et al.	
V	AC				
	AD				
	AE				
	AF				
	AG				
	AH				
	AI				
FOR	ELGN PATE	YT BOCUMENTS	1	1	
		Document No.	Date	Country	Translation Yes No
LAN	AL	2 107 313	03/20/98	RU	Abstract
(Ha)	AM	2 069 878	11/27/96	RU	Abstract
LAGI	-AN-	998995	-09/13/81	SU	X
PVO	AO				
			1		<del>                                     </del>
	AR				
***************************************	AS				
	AT				
EXAMINER	12xxt	4		DATE CONSIDERED	0/06
if not in confo 1. The at	rmance and no	nco considered, whether or not t considered. Include copy of th information should not be constr	is form with next	communication to Applicant.	

subject invention.

This is not a representation that a search has been made.

### **ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18

Stylesheet Version v18.0

Title of Invention

DIRECTIONAL ELECTROMAGNETIC WAVE RESISTIVITY APPARATUS AND METHOD

**Application Number:** 

10/709212

Confirmation Number:

3211

First Named Applicant:

QIMING LI

Attorney Docket Number:

19.0405D1

Art Unit:

Examiner:

Search string:

( 6937022 or 20050083063 ).pn

#### **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
AW	1	6937022	2005-08-30	WANG ET AL.			

# **US Published Applications**

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
12h	1	20050083063	2005-04-21	OMERAGIC ET			
Jano				AL.	·		

### Signature

/	
Examiner Name	Date
Mast	3/30/66